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SERIAL NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
08/415,075	03/30/95	KOENCK S	35717YA

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SHIN, K EXAMINER	
ART UNIT	PAPER NUMBER
2111	7

DATE MAILED:
02/12/96

Please find below a communication from the EXAMINER in charge of this application.

Commissioner of Patents

Office Action Summary

Application No.	Applicant(s)
08/415,075	Koenck
Examiner	**Group Art Unit**
K. Shin	2111

☒ Responsive to communication(s) filed on *Mar 30, 1995* .

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire *3* month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) *1-10* is/are pending in the application.

Of the above, claim(s) *9 and 10* is/are withdrawn from consideration.

☒ Claim(s) *6-8* is/are allowed.

☒ Claim(s) *1-5* is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____ .

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____ .

☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). *6*

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Part III DETAILED ACTION

Election/Restriction

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

Group I. Claims 1-8, drawn to battery charging and discharging, classified in Class 320, subclass 5+.

Group II. Claims 9-10, drawn to battery manufacturing, classified in Class 29 , subclass 623.1+.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions in Group I and Group II are disclosed as different combinations which are not connected in design, operation or effect. These combinations are independent if it can be shown that (1) they are not disclosed as capable of use together, (2) they have different modes of operation, (3) they have different functions, or (4) they have different effects. (MPEP 806.04, MPEP 808.01). In the instant case the claims in Group I are directed to charging/discharging batteries and the claims in Group II are directed to manufacturing batteries.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

4. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

6. During a telephone conversation with Mr. Sean Suiter on January 30, 1996, a provisional election was made with traverse to prosecute the invention of Group I, claims 1-8. Affirmation of this election must be made by applicant in responding to this Office action. Claims 9-10 are withdrawn from further consideration by the Examiner, 37 C.F.R. § 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 101

7. 35 U.S.C. § 101 reads as follows:
"Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter or any new and useful improvement thereof, may obtain a patent therefore, subject to the conditions and requirements of this title".

8. The non-statutory double patenting rejection, whether of the obvious-type or non-obvious-type, is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent. *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969); *In re Vogel,* 422 F.2d 438, 164 USPQ 619 (CCPA 1970); *In re Van Ornam,* 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Longi,* 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); and *In re Goodman,* 29 USPQ2d 2010 (Fed. Cir. 1993).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321 (b) and (c) may be used to overcome an actual or provisional rejection based on a non-statutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.78 (d).

Effective January 1, 1994, a registered attorney or agent of record may sign a Terminal Disclaimer. A Terminal Disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

9. Claim 1 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 8 of U.S. Patent No. 4,553,081. Although the conflicting claims are not identical, they are not patentably distinct from each other because the only difference between the claims is the location of the memory means in respective battery powered electronic systems, i.e. the memory means which stores battery data is located within the battery pack (in the battery powered electronic system of present application) whereas the same memory is located in the battery conditioning system (in the battery powered electronic system of the patent). It would have been obvious design choice to have the memory means located within different components of the system without presentation of material evidence regarding patentability of such difference.

10. Claims 2-5 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 8 of U.S. Patent No. 4,553,081 in view of Norton or Hansel or Stewart further in view of Fernandez.

Claim 8 of U.S. Patent No. 4,553,081 substantially discloses the claimed inventions as described above.

Nor ton or Hansen or Stewart respectively teaches the well-known fact that multiple batteries (cells) can be configured to supply a first voltage or a second voltage to power different operating loads in a battery powered system.

Fernandez teaches the well-known fact of using a voltage clamping device (such as a zener diode) to protect electronic devices against transient voltages. See col 2, lines 51-62.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the battery powered memory device of claim 8 of U.S. Patent No. 4,553,081 to further include a voltage clamping device to protect the electronic device against transient high voltage as taught by Fernandez, and to produce a first voltage and a second voltage to power different operating loads in a battery powered system as taught by Norton or Hansen or Stewart, in order to provide an improved battery powered electronic device/system.

Allowable Subject Matter

11. Claims 6-8 are allowable over the prior art of record.

Conclusion

12. Regarding claims 3-5 where limitations of volatile memory and non-volatile memory are recited as part of the memory device, Applicant admits at page 11, lines 12-17, that he is using an existing memory device having volatile memory (RAM) and non-volatile memory (EEPROM). Thus, the structural limitations as recited in claims 3-5 would be obvious in view of the admission, and thus not entitled to any patentable weight.

13. Further, regarding claims 3 and 5, the specification does not disclose why and how a volatile memory (RAM) is used in the claimed invention. Thus, at least for this reason, it would be obvious design choice to have the memory device comprise: the volatile memory alone, or the volatile memory in combination with the non-volatile memory, as recited in claims 3 and 5 respectively.

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

McClure substantially discloses the claimed inventions. See col 9, line 46 - col 10, line 46 regarding claims 6-8.

Interiano et al substantially discloses the claimed inventions. Interiano et al teaches the that the memory device in the battery pack may comprise RAM 38 (volatile memory) and ROM 36 (non-volatile memory). See Figs 1-2.

Toko or Gupta substantially discloses the claimed inventions.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner K. Shin whose telephone number is (703) 308-0711.

PETER S. WONG
SUPERVISORY PATENT EXAMINER
GROUP 2100

KCS
January 30, 1996